

## Overview of Specifications of Measures Displayed on Hospital Compare as of September 1, 2005

Note: This Overview is illustrative only. For the full set of micro-specifications, please see <http://qnetexchange.org>

| Heart Attack (Acute Myocardial Infarction or AMI) |  |   |   |
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| Performance Measure                               | Measure Description  | Criterion Met or Acceptable Alternative   | Rate Calculation  |
| <b>Aspirin at Arrival</b>                         | Acute myocardial infarction (AMI) patients without aspirin contraindications who received aspirin within 24 hours before or after hospital arrival | <p>Documentation that aspirin was prescribed within 24 hours before or after hospital arrival. Exceptions include patients with one or more of the following potential contraindications or reasons for not prescribing aspirin documented in the medical record, including:</p> <ul style="list-style-type: none"> <li>• Aspirin allergy</li> <li>• Active bleeding on arrival or within 24 hours after arrival</li> <li>• Warfarin/Coumadin as pre-arrival medication</li> <li>• Other reason documented by a physician, nurse practitioner, or physician assistant for not prescribing aspirin within 24 hours before or after hospital arrival</li> </ul> | <p><u>Numerator:</u> AMI patients who received aspirin within 24 hours before or after hospital arrival</p> <p><u>Denominator:</u> AMI patients age 18 or older with no aspirin contraindications who were admitted to the hospital</p> |
| <b>Aspirin at Discharge</b>                       | Acute myocardial infarction (AMI) patients without aspirin contraindications who were prescribed aspirin at hospital discharge                     | <p>Documentation that aspirin was prescribed at discharge in cases where there is no documentation of one or more of the following potential contraindications/reasons for not prescribing aspirin at discharge:</p> <ul style="list-style-type: none"> <li>• Aspirin allergy</li> <li>• Active bleeding on arrival or during hospital stay</li> <li>• Warfarin/Coumadin prescribed at discharge</li> <li>• Other reasons documented by a physician, nurse practitioner, or physician assistant for not</li> </ul>  | <p><u>Numerator:</u> AMI patients prescribed aspirin at hospital discharge</p> <p><u>Denominator:</u> AMI patients age 18 or older with no aspirin contraindications</p>  |

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|   |   | prescribing aspirin at discharge  |   |
| <b>ACE Inhibitor for Left Ventricular Systolic Dysfunction (LVSD)</b> | Acute myocardial infarction (AMI) patients with left ventricular systolic dysfunction (LVSD) and without angiotensin converting enzyme inhibitor (ACE inhibitor) contraindications who were prescribed an ACE inhibitor at hospital discharge | <p>Documentation that an ACE inhibitor was prescribed at discharge in patients with LVSD who were not participating in an ACE inhibitor alternative clinical trial at the time of discharge and where there is no documentation of one or more of the following potential contraindication/reason for not prescribing an ACE inhibitor at discharge:</p> <ul style="list-style-type: none"> <li>• ACE inhibitor allergy</li> <li>• Moderate or severe aortic stenosis</li> <li>• Other reasons documented by a physician, nurse practitioner, or physician assistant for not prescribing an ACE inhibitor at discharge</li> </ul> <p>LVSD is defined as documentation of a left ventricular ejection fraction (LVEF) less than 40% or a narrative description of left ventricular function (LVF) consistent with moderate or severe systolic dysfunction.</p> | <p><u>Numerator:</u> AMI patients who were prescribed an ACE inhibitor at hospital discharge</p> <p><u>Denominator:</u> AMI patients age 18 and older with LVSD and without ACE inhibitor contraindications</p> |
| <b>Beta Blocker at Arrival</b>  | Acute myocardial infarction (AMI) patients without beta blocker contraindications who received a beta blocker within 24 hours after hospital arrival  | <p>Documentation that a beta-blocker was prescribed within 24 hours after hospital arrival in cases where there is no documentation of one or more of the following potential contraindications/reasons for not prescribing a beta-blocker on arrival:</p> <ul style="list-style-type: none"> <li>• Beta blocker allergy</li> <li>• Bradycardia (heart rate less than 60 bpm) on arrival or within 24 hours after arrival while not on a beta blocker</li> <li>• Heart failure on arrival or within 24 hours after arrival</li> <li>• Second or third degree heart block on ECG on arrival or within 24 hours after arrival and did not</li> </ul>  | <p><u>Numerator:</u> AMI patients who received a beta blocker within 24 hours after hospital arrival</p> <p><u>Denominator:</u> AMI patients age 18 and older without beta blocker contraindications</p>        |

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|  |  | <ul style="list-style-type: none"> <li>have a pacemaker</li> <li>Shock on arrival or within 24 hours after arrival</li> <li>Systolic blood pressure less than 90 mm Hg on arrival or within 24 hours after arrival</li> <li>Other reasons documented by a physician, nurse practitioner, or physician assistant for not prescribing a beta blocker on arrival within 24 hours after hospital arrival</li> </ul>   |  |
| <b>Beta Blocker at Discharge</b>             | Acute myocardial infarction (AMI) patients without beta blocker contraindications who were prescribed a beta blocker at hospital discharge | <p>Documentation that a beta blocker was prescribed at discharge in cases where there is no documentation of one or more of the following potential contraindications/reasons for not prescribing a beta blocker at discharge:</p> <ul style="list-style-type: none"> <li>Beta blocker allergy</li> <li>Bradycardia (heart rate less than 60 bpm) on day of discharge or day prior to discharge while not on a beta blocker</li> <li>Second or third degree heart block on electrocardiogram (ECG) on arrival or during hospital stay and does not have a pacemaker</li> <li>Systolic blood pressure less than 90 mm Hg on day of discharge or day prior to discharge while not on a beta blocker</li> <li>Other reasons documented by a physician, nurse practitioner, or physician assistant for not prescribing a beta blocker at discharge</li> </ul> | <p><u>Numerator:</u> AMI patients who were prescribed a beta blocker at hospital discharge</p> <p><u>Denominator:</u> AMI patients age 18 and older without beta blocker contraindications</p> |
| <b>Thrombolytic agent received within 30</b> | AMI patients receiving thrombolytic therapy during the hospital stay with a time from  | Documentation that thrombolytic therapy was administered within 6 hours after hospital arrival for AMI patients with ST-segment elevation   | <u>Numerator:</u> AMI patients whose time from hospital arrival to thrombolysis is   |

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| <b>minutes of hospital arrival</b>                         | hospital arrival to thrombolysis of 30 minutes or less   | or left bundle branch block (LBBB) on the electrocardiogram (ECG) performed closest to the hospital arrival   | 30 minutes or less<br><br><u>Denominator:</u> AMI patients age 18 and older with an ST-segment elevation or LBBB on an ECG who received thrombolytic therapy   |
| <b>PCI Received Within 120 Minutes Of Hospital Arrival</b> | AMI patients receiving percutaneous coronary intervention (PCI) during the hospital stay with a time from hospital arrival to PCI of 120 minutes or less | Documentation that PCI was performed within 24 hours after hospital arrival for AMI patients with ST-segment elevation or left bundle branch block (LBBB) on the electrocardiogram (ECG) performed closest to hospital arrival. Exceptions include patients administered thrombolytic agents. | <u>Numerator:</u> AMI patients whose time from hospital arrival to PCI is 120 minutes or less<br><br><u>Denominator:</u> AMI patients age 18 and older with ST-segment elevation or LBBB on ECG who received PCI   |
| <b>Adult Smoking Cessation Advice/ Counseling</b>          | AMI patients with a history of smoking cigarettes, who are given smoking cessation advice or counseling during a hospital stay                           | Documentation that for AMI patients who are smokers (defined as someone who has smoked any time during the year prior to hospital arrival), smoking cessation advice or counseling was provided during the hospital stay  | <u>Numerator:</u> AMI patients (cigarette smokers) who receive smoking cessation advice or counseling during the hospital stay<br><br><u>Denominator:</u> AMI patients age 18 and older with a history of smoking cigarettes anytime during the year prior to hospital arrival |

| Heart Failure   |   |  |  |
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| Performance Measure   | Measure Description   | Criterion Met or Acceptable Alternative  | Rate Calculation   |
| <b>Left Ventricular Function (LVF) Assessment</b>                     | Heart failure patients with documentation in the hospital record that left ventricular function (LVF) was assessed before arrival, during hospitalization, or was planned for after discharge                   | Documentation that left ventricular function was assessed before arrival, during hospitalization, or was planned for after discharge   | <p><u>Numerator:</u> Heart failure patients with documentation in the hospital record that LVF was assessed before arrival, during hospitalization, or was planned for after discharge</p> <p><u>Denominator:</u> Heart failure patients age 18 and older</p>                              |
| <b>ACE Inhibitor for Left Ventricular Systolic Dysfunction (LVSD)</b> | Heart failure patients with left ventricular systolic dysfunction (LVSD) and without angiotensin converting enzyme (ACE) inhibitor contraindications who were prescribed an ACE inhibitor at hospital discharge | <p>Documentation that an ACE inhibitor was prescribed at discharge in patients with LVSD who were not participating in an ACE inhibitor alternative clinical trial at the time of discharge and where there is no documentation of one or more of the following potential contraindications/reasons for not prescribing an ACE inhibitor at discharge:</p> <ul style="list-style-type: none"> <li>• ACE inhibitor allergy</li> <li>• Moderate or severe aortic stenosis</li> <li>• Other reason documented by a physician, nurse practitioner, or physician assistant for not prescribing an ACE inhibitor at discharge</li> </ul> <p>LVSD is defined as documentation of a left ventricular ejection fraction (LVEF) less than 40% or a narrative description of left ventricular function (LVF) consistent with moderate or severe systolic dysfunction.</p> | <p><u>Numerator:</u> Heart failure patients with LVSD and without ACE inhibitor contraindications who were prescribed an ACE inhibitor at hospital discharge.</p> <p><u>Denominator:</u> Heart failure patients age 18 and older with LVSD and without ACE inhibitor contraindications</p> |

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| <b>Discharge Instructions</b>                     | Heart failure patients discharged home with written instructions or educational material given to patient or care giver at discharge or during the hospital stay addressing <b>all</b> of the following: activity level, diet, discharge medications, follow-up appointment, weight monitoring, and what to do if symptoms worsen | Documentation that heart failure patients discharged to home, home care or home IV therapy, or their care givers were given written discharge instructions or other educational materials addressing all of the following: activity level, diet, discharge medications, follow-up appointment, weight monitoring, and what to do if symptoms worsen | <p><u>Numerator:</u> Heart failure patients with documentation that they or their care givers were given written discharge instructions or other educational material addressing <b>all</b> of the following: activity level, diet, discharge medications, follow-up appointment, weight monitoring, and what to do if symptoms worsen</p> <p><u>Denominator:</u> Heart failure patients age 18 and older discharged home</p> |
| <b>Adult Smoking Cessation Advice/ Counseling</b> | Heart failure patients with a history of smoking cigarettes, who are given smoking cessation advice or counseling during a hospital stay  | Documentation that for heart failure patients who are smokers (defined as someone who has smoked any time during the year prior to hospital arrival), smoking cessation advice or counseling was provided during the hospital stay  | <p><u>Numerator:</u> Heart failure patients (cigarette smokers) who receive smoking cessation advice or counseling during the hospital stay</p> <p><u>Denominator:</u> Heart failure patients age 18 and older with a history of smoking cigarettes anytime during the year prior to hospital arrival</p>   |

| Pneumonia                              |  |   |  |
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| Performance Measure                    | Measure Description  | Criterion Met or Acceptable Alternative   | Rate Calculation   |
| <b>Initial Antibiotic Timing</b>       | Pneumonia patients who receive their first dose of antibiotic within 4 hours of arrival at the hospital  | <p>Documentation of first dose of antibiotics taken within 4 hours after arrival at hospital. Exceptions include patients who:</p> <ul style="list-style-type: none"> <li>• Had no working diagnosis of pneumonia at admission</li> <li>• Did not receive antibiotics during the admission</li> <li>• Received antibiotics within 24 hours prior to arrival at the hospital</li> </ul>      | <p><u>Numerator:</u><br/>Pneumonia patients who received their first dose of antibiotics within 4 hours of arrival at the hospital</p> <p><u>Denominator:</u><br/>Pneumonia patients aged 18 years and older</p>                                     |
| <b>Pneumococcal Vaccination Status</b> | Pneumonia patients age 65 and older who were screened for pneumococcal vaccine status and were administered the vaccine prior to discharge, if indicated                       | <p>Documentation of screening and administration of pneumococcal vaccine for patients aged 65 years and older. Exceptions include patients who:</p> <ul style="list-style-type: none"> <li>• Had no working diagnosis of pneumonia at admission</li> <li>• Expired in the hospital or were discharged to hospice care</li> <li>• Were transferred to another acute care hospital</li> </ul> | <p><u>Numerator:</u><br/>Pneumonia inpatients who were screened for pneumococcal vaccine status and were administered the vaccine prior to discharge, if indicated</p> <p><u>Denominator:</u><br/>Pneumonia patients age 65 and older</p>            |
| <b>Oxygenation Assessment</b>          | Pneumonia patients who had an assessment of arterial oxygenation by arterial blood gas measurement or pulse oximetry within 24 hours prior to or after arrival at the hospital | Documentation of arterial oxygenation assessment by either arterial blood gas (ABG) or pulse oximetry within 24 hours of hospital arrival. Exceptions include patients who had no working diagnosis of pneumonia at admission.  | <p><u>Numerator:</u><br/>Pneumonia patients whose arterial oxygenation was assessed by arterial blood gas (ABG) or pulse oximetry within 24 hours prior to, or after, hospital arrival</p> <p><u>Denominator:</u><br/>Pneumonia patients aged 18</p> |

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|   |  |   | years and older  |
| <b>Blood Culture Performed Before First Antibiotic Received in Hospital</b> | Pneumonia patients whose initial hospital blood culture specimen was collected prior to first hospital dose of antibiotics           | Documentation that initial blood culture was performed prior to the first hospital dose of antibiotics for pneumonia patients age 18 or older . Exceptions include patients who: <ul style="list-style-type: none"> <li>• Had no working diagnosis of pneumonia at admission</li> <li>• Did not receive antibiotics or a blood culture</li> </ul>   | <u>Numerator:</u><br>Pneumonia patients whose initial blood culture was performed prior to the first hospital dose of antibiotics<br><br><u>Denominator:</u><br>Pneumonia patients 18 years of age and older   |
| <b>Adult smoking cessation advice/ counseling</b>                           | Pneumonia patients with a history of smoking cigarettes, who are given smoking cessation advice or counseling during a hospital stay | Documentation that for pneumonia patients who are smokers (defined as someone who has smoked any time during the year prior to hospital arrival), smoking cessation advice or counseling was provided during the hospital stay  | <u>Numerator:</u><br>Pneumonia patients (cigarette smokers) who receive smoking cessation advice or counseling during the hospital stay<br><br><u>Denominator:</u><br>Pneumonia patients 18 years of age or older with a history of smoking cigarettes anytime during the year prior to hospital arrival |
| <b>Appropriate Initial Antibiotic Selection</b>                             | Immunocompetent patients with pneumonia who receive an initial antibiotic regimen that is consistent with current guidelines         | Documentation that immunocompetent patients with pneumonia received initial antibiotic regimen during the first 24 hours after arrival at the hospital. Exceptions include patients who: <ul style="list-style-type: none"> <li>• Were immunocompromised based on the following comorbidities: <ul style="list-style-type: none"> <li>➢ HIV</li> <li>➢ AIDS</li> <li>➢ Immunosuppression/anti-neoplastic therapy</li> <li>➢ Leukemia/lymphoma</li> <li>➢ Organ transplants</li> <li>➢ Cystic Fibrosis (CF)</li> </ul> </li> <li>• Did not receive antibiotics or a blood culture</li> </ul> | <u>Numerator:</u><br>Pneumonia patients who received an initial antibiotic regimen consistent with current guidelines during the first 24 hours of their hospitalization<br><br><u>Denominator:</u><br>Pneumonia patients 18 years of age or older   |



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|  |  | <ul style="list-style-type: none"> <li>• Had no working diagnosis of pneumonia at admission</li> <li>• Did not receive antibiotics during the admission</li> </ul> |  |
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| Surgical Infection Prevention   |   |  |   |
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| Performance Measure   | Measure Description   | Criterion Met or Acceptable Alternative  | Rate Calculation  |
| <b>Prophylactic Antibiotic Received Within 1 Hour Prior to Surgical Incision</b>    | Surgical patients who received prophylactic antibiotics within 1 hour prior to surgical incision          | <p>Documentation of patient receiving selected surgery. Exceptions include patients who:</p> <ul style="list-style-type: none"> <li>• Had a principal or secondary diagnosis suggestion of preoperative infectious disease</li> <li>• Were receiving antibiotics within 24 hours of arrival</li> <li>• Had colon surgery and received oral prophylactic antibiotics only</li> </ul>              | <p><u>Numerator:</u> Surgical patients who received prophylactic antibiotics within 1 hour of surgical incision (2 hours if receiving vancomycin or a fluoroquinolone for prophylaxis)</p> <p><u>Denominator:</u> All selected surgical patients age 18 and older</p> |
| <b>Prophylactic Antibiotics Discontinued Within 24 Hours After Surgery End Time</b> | Surgical patients whose prophylactic antibiotics were discontinued within 24 hours after surgery end time | <p>Documentation of patient receiving selected surgery. Exceptions include patients who:</p> <ul style="list-style-type: none"> <li>• Had a principal or secondary diagnosis suggestion of preoperative infectious disease</li> <li>• Were diagnosed with and treated for infections within two days after surgery date</li> <li>• Had other procedures of interest during this visit</li> </ul> | <p><u>Numerator:</u> Surgical patients whose prophylactic antibiotics were discontinued within 24 hours after surgery end time</p> <p><u>Denominator:</u> All selected surgical patients age 18 and older</p>   |